

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

T00003NY
Revision No. 21
Bombardier Inc.
BD-700-1A10
BD-700-1A11
BD-700-2A12

November 12, 2019

TYPE CERTIFICATE DATA SHEET NO. T00003NY

This data sheet which is part of Type Certificate No. T00003NY, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: **Bombardier Inc**
800 Boul. René-Levesque Ouest
Montreal, Quebec, Canada H3B 1Y8

I - Model BD-700-1A10 (Transport Category), Approved November 13, 1998, by the FAA and July 31, 1998, by the Canadian Department of Transport (DOT).

MAXIMUM
WEIGHTS

	lb.	kg.
Max. Taxi and Ramp	93 750 95 250 (See NOTE 6) 96 250 (See NOTE 7) 98 250 (See NOTE 10) 99 750 (See NOTE 15)	42 525 43 205 (See NOTE 6) 43 659 (See NOTE 7) 44 565 (See NOTE 10) 45 246 (See NOTE 15)
Max. Takeoff	93 500 95 000 (See NOTE 6) 96 000 (See NOTE 7) 98 000 (See NOTE 10) 99 500 (See NOTE 15)	42 415 43 092 (See NOTE 6) 43 546 (See NOTE 7) 44 452 (See NOTE 10) 45 132 (See NOTE 15)
Max. Landing	78 600	35 655
Max. Zero Fuel	56 000	25 400
Min. Flight Weight	48 200	21 865

FUEL CAPACITY

	Load		Weight **	
	U.S. Gal.	liters	lb.	kg
Usable				
2 main tanks (each)	2223	8415	15005	6805
1 Center Tank	1645	6227	11105	5036
1 Aft Tank	337	1276	2275	1032
Total	6428	24333	43390	19678
Unusable (drainable)*	30	114	203	92
Undrainable*	14.8	56.0	100	45.4

* See NOTE 3

** Assuming a fuel density of 6.75 lbs/US Gal

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For aircraft incorporating Service Bulletin 700-28-040 (or Modsum 700T804402):

Usable	Load		Weight **	
	U.S. Gal.	Liters	lb.	kg.
2 Main Tanks (each)	2229	8438	15045	6824
1 Center Tank	1879	7111	12683	5753
1 Aft Tank	337	1276	2275	1032
Total	6674	25256	45050	20433
Unusable (drainable)*	10.6	40.1	72	32.4
Undrainable*	14.8	56.0	100	45.4

*See NOTE 3

**Assuming a fuel density of 6.75 lbs./US Gal.

TYPE CERTIFICATION
APPLICATION DATE

27 January 1994

SERIAL NUMBERS
ELIGIBLE

9002 and subsequent

APPROVED
PUBLICATIONS

BD-700-1A10

Airplane Flight Manual (AFM), Bombardier Publication CSP 700-1 or CSP 700-1A for the appropriate weight configuration and subsequent approved revisions.

Time Limits/Maintenance Checks Manual, Bombardier Publication BD 700 TLMC and subsequent approved revisions contains the Certification Maintenance Tasks, Life Limited Parts and Damage Tolerant Inspections. This information is consistent with Engineering Reports RBR-C700-167 and RAS-C700-990. See NOTE 5.

Structural Repair Manual (SRM), Bombardier Publication BD 700 SRM and subsequent approved revisions.

BD-700-1A10 equipped with the “Global Vision Flight Deck” (See Note 17)

Airplane Flight Manual (AFM), Bombardier Publication CSP 700-1V for the appropriate weight configuration and subsequent approved revisions.

Time Limits / Maintenance Checks Manual, Bombardier Publication GL 6000 TLMC and subsequent approved revisions contains the Certification Maintenance Tasks, Life Limited Parts and Damage Tolerant Inspections. This information is consistent with Engineering Reports RBR-C700-167 and RAS-C700-990. See NOTE 5.

Structural Repair Manual (SRM), Bombardier Publication GL 6000 SRM and subsequent approved revisions.

Applicable to Both Configurations

Drawing List, Bombardier Publication RAL-700-0001 at Issue D.

Type Certification
Configuration

The approved type design is defined in the document RAZ-C700-127 at Issue NC or later approved revision. The approved type design number appropriate for the "as delivered" configuration of a particular BD-700-1A10 airplane is defined in the document RAL-700-XXXX (XXXX denotes the serial number for the aircraft concerned).

C. G. RANGE

Refer to Transport Canada approved Airplane Flight Manual (AFM), Bombardier Publication CSP 700-1, CSP 700-1A or CSP 700-1V for the appropriate configuration. See NOTE 1.

DATUM

FS 0.0 located at 144 in. Fwd of the aircraft nose

II - Model BD-700-1A11 (Transport Category), Approved September 20, 2004, by the FAA and March 12, 2004, by the Canadian Department of Transport (DOT).

MAXIMUM
WEIGHTS

	lb.	kg.
Max. Taxi and Ramp	87 950 89 950* 92 750**	39 893 40 801* 42 071**
Max. Takeoff	87 700 89 700* 92 500**	39 780 40 687* 41 957**
Max. Landing	78 600	35 655
Max. Zero Fuel	56 000	25 400
Min. Flight Weight	51 200	23 224

* See NOTE 14

** See AFM, as listed in Approved Publications, for other weight limitations and aircraft eligibility.

FUEL CAPACITY

	Load		Weight **	
	U.S. Gal.	liters	lb.	kg
Usable				
2 main tanks (each)	2229	8438	15046	6824
1 Center Tank	903	3418	6095	2765
Total	5361	20294	36187	16413
Unusable (drainable)*	10	37.9	67.5	30.6
Undrainable*	14.8	56.0	100	45.4

* See NOTE 3

** Assuming a fuel density of 6.75 lbs/US Gal

For aircraft incorporating Bombardier Service Bulletin 700-1A11-11-008

	Load		Weight **	
	U.S. Gal.	liters	lb.	kg
Usable				
2 main tanks (each)	2229	8438	15046	6824
1 Center Tank	1357	5136	9158	4158

Total	5815	22012	39250	17806
Unusable (drainable)*	10	37.9	67.5	30.6
Undrainable*	14.8	56.0	100	45.4

* See NOTE 3

** Assuming a fuel density of 6.75 lbs/US Gal

TYPE CERTIFICATION
APPLICATION DATE

15 February 2002

SERIAL NUMBERS
ELIGIBLE

9127 and subsequent

APPROVED
PUBLICATIONS

BD-700-1A11

Airplane Flight Manual (AFM), Bombardier Publication CSP 700-5000-1 for the appropriate weight configuration and subsequent approved revisions.

Time Limits/Maintenance Checks Manual, Bombardier Publication BD-700-1A11 TLMC and subsequent approved revisions contains the Certification Maintenance Tasks, Life Limited Parts and Damage Tolerant Inspections. This information is consistent with Engineering Reports RBR-C700-167 and RAS-C700-990. See NOTE 5.

Structural Repair Manual (SRM), Bombardier Publication BD 700 SRM and subsequent approved revisions.

BD-700-1A11 equipped with the "Global Vision Flight Deck" (See Note 17).

1 Airplane Flight Manual (AFM), Bombardier Publication CSP 700-5000-1V for the appropriate weight configuration and subsequent approved revisions.

Time Limits / Maintenance Checks Manual, Bombardier Publication GL 5000 GVFD TLMC and subsequent approved revisions contains the Certification Maintenance Tasks, Life Limited Parts and Damage Tolerant Inspections. This information is consistent with Engineering Reports RBR-C700-167 and RAS-C700-990. See NOTE 5.

Structural Repair Manual (SRM), Bombardier Publication GL 5000 GVFD SRM and subsequent approved revisions.

Applicable to Both Configurations

Drawing List, Bombardier Publication RAL-700-0002 at Issue B or later Transport Canada approved revisions.

Type Certification
Configuration

The approved type design is defined in the document RAZ-C700-127 at Issue A-2 or later approved revision. The approved type design number appropriate for the "as delivered" configuration of a particular BD-700-1A11 airplane is defined in the document RAL-700-XXXX (XXXX denotes the serial number for the aircraft concerned).

C. G. RANGE

Refer to Transport Canada approved Airplane Flight Manual (AFM), Bombardier Publication CSP 700-5000-1 or CSP 700-5000-1V for the appropriate configuration. See NOTE 1.

DATUM

FS 0.0 located at 144 in. + 32 in. Fwd of the aircraft nose

III - Data Pertinent to BD700-1A10 and BD-700-1A11 except as indicated

ENGINES

Two Rolls-Royce Deutschland Ltd. BR700-710A2-20

FUEL

Type	Specifications		
	Canada	U.S.A.	U.K.
Jet A	CAN2-3.23	ASTM D1655	D. Eng. RD.2494
Jet A-1	CAN2-3.23	ASTM D1655	D. Eng. RD.2494
JET-B	CAN2-3.22-M80	ASTM D1655-JETB	D. Eng. RD.2486
JP-4	CAN2-3.22-M80	MIL-T-5624-JP4	D. Eng. RD.2486
JP-8	-	MIL-T-83133	D. Eng. RD.2453
JP-5	-	MIL-T-5624	D. Eng. RD.2452

Fuel additives restricted to those listed in AFM (Limitations, Fuel Additives)

OIL

BD-700-1A10

Engine, APU: Refer to Aircraft Maintenance manual, Bombardier Publication BD-700-AMM, Chapter 51, or GL 6000 AMM, Chapter 51, for the appropriate configuration.

BD-700-1A11

Engine, APU: Refer to Aircraft Maintenance manual, Bombardier Publication BD-700-1A11 AMM, Chapter 51, or GL 5000 GVFD AMM, Chapter 51, for the appropriate configuration.

ENGINE LIMITS
CONDITIONS

	SL Static Thrust		Fan RPM	Core RPM	ITT		Time Limit
	lbf	kN	N ₁ %	N ₂ %	°C	°F	
Max. Takeoff	14750	65.6	102.0	99.6	900	1652	5 min.
Max. Continuous	14450	64.3	102.0	98.9	860	1580	-
Idle Range	-	-	-	58.0 min.	860 max.	1580 max.	-
Max. Overspeed/ Over temperature	-	-	102.5	99.8	905	1661	20 sec.
Reverse Thrust	-	-	*	-	-	-	-
Starting, on ground	-	-	N/A	N/A	700	1292	-
Starting, in air	-	-	N/A	N/A	850	1562	-

* For Reverse Thrust, FADEC controls the Fan RPM (N₁) to 70.0 % for 30 seconds.

OIL TEMPERATURE

	°C	°F
Minimum for Starting	-40	-40
Minimum before accelerating above idle	20	68
Maximum Continuous	160	320
Maximum Permissible	160	320

OIL PRESSURE

Take-off Power	45 psi min.
Steady State Idle	25 psi min.

APU

Allied Signal RE 220 (GX)

APU LIMITS

Maximum RPM:	106%	
Maximum EGT:	°C	°F
Starting	657-1020	1215-1868

Running	594-714	1101-1317
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AIRSPEED LIMITS

V _{mo} and M _{mo}	m.p.h.	knots	Mach
Sea Level to 8000 ft.	346	300	-
8000 ft. to 30267 ft.	392	340	-
30267 ft. to 35000 ft.	-	-	0.89
@ 47000 ft.	-	-	0.871
@ 47000 ft.	-	-	0.858 (see Note 8)
@ 51000 ft.	-	-	0.855
@ 51000 ft.	-	-	0.842 (see Note 8)
V _{fe} 6°	242	210	-
16°	242	210	-
30°	213	185	-
V _{fc}	-	369	0.915
V _d	-	398	0.97
See Flight Manual for variation of V _a with altitude and aircraft weight			
V _{se}	259	225	-
V _{mca}	99	86	-
V _{mcg}	96	84	-
V _{LO}	230	200	-
V _{LE}	288	250	-

MEAN AERO-DYNAMIC CHORD

153.6 in. (3.9 m) (MAC leading edge at fuselage station 676.87 in.)

LEVELING MEANS

Plumb bob and target in the Aft equipment bay at FS 926

MINIMUM CREW

Two (Pilot and Co-Pilot)

MAXIMUM OCCUPANTS

Twenty two (including the crew and no more than 19 passengers)
See NOTE 2

OIL CAPACITY

	Load		Weight	
	U.S. Gal.	liters	lb.	kg.
2 Engines (each) (Incl. oil repl. lines)	2.6	9.9	20.0	9.1
1 Oil Repl. Tank	1.7	6.4	13	5.9
Total	6.9	26.2	53.0	24.1
Usable	1.01	3.83	7.8	3.55

MAX. OPERATING ALTITUDE

Take off and landing: 13,700 ft
En route: 51,000 ft

CONTROL SURFACE MOVEMENTS

Rudder	37° Left	37° Right
Horizontal Stabilizer	2° LE Up	12° LE Down
Aileron	26.5° TE Up	23° TE Down
Elevator	24° TE Up	19° TE Down

Ground spoilers	45° Up	-
Multi-function spoilers (Inboard to Outboard)	40/40/46/46 ° Up	-

SERVICE INFORMATION Service Bulletins, structural repair manuals, and aircraft flight manuals which contain a statement that the document is Transport Canada approved or Transport Canada approved through the Manufacturers Design Approval Representative are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only.

IMPORT ELIGIBILITY A U.S. Airworthiness Certificate may be issued on the basis of the Canadian Department of Transport "Certificate of Airworthiness for Export" signed by the Minister of Transport. This form must contain the following statement:

"This certifies that the aircraft described below has been manufactured in conformity with data forming the basis for the Transport Canada Type Certificate No. A-177 and includes the minimum type design defined in document RAZ-C700-127 at Issue NC or subsequent approved revisions as being required to comply with the basis for the FAA Type Certificate No. T00003NY", and is in a condition for safe operation.

The U.S. airworthiness certification basis for aircraft type certificated under FAR 21.29 and exported by the country of manufacture is FAR 21.183(c) or FAR 21.185(c)

The U.S. airworthiness certification basis for aircraft type certificated under FAR 21.29 and exported from countries other than the country of manufacture (e.g. third party country) is FAR 21.183(d) or FAR 21.185(b)

The U.S. airworthiness certification basis for the issuance of an airworthiness certificate for aircraft type certificated under FAR 21.21 and manufactured in a foreign country under a licensing arrangement is FAR 21.183(d) or FAR 21.183(b)

The U.S. airworthiness certification basis for an aircraft originally type certificated under FAR 21.21 but transferred outside the U.S. is 21.183(d)

Additional guidance is contained in FAA AC 21-23A, or subsequent revision, Airworthiness Certification of Civil Aircraft, Engines, Propellers and Related Products Imported into the United States.

CERTIFICATION BASIS FAR Part 25 dated February 1, 1965, including:
Amendments 25-1 through 25-91,
Amendment 25-94, Amendment 25-96 and Amendment 25-97.
There are no exceptions.

Exemptions:

- (1) No. 6726. FAR 25.1435(b)(1) Hydraulic System Proof Pressure Testing, applicable to BD-700-1A10 only.
- (2) See Notes 9 and 12 for additional exemptions

Additional FAA Requirements:

- (1) FAR Part 36 dated December 1, 1969,
as amended through Amendment 36-28 for both BD-700-1A10 and BD-700-1A11.

- (2) Applicable portions of FAR 34 dated September 10, 1990, as amended through Amendment 34-1 inclusive.
 - (3) Special Condition No. 25-140-SC dated 24 August 1998, HIRF
 - (4) Special Condition No. 25-288-SC, Enhanced Flight Visibility System, effective date May 12, 2005
 - (5) Special Condition No. 25-658-SC, Non-Rechargeable Lithium Batteries, See Note 22
- Equivalent safety has been established for the following requirements:
- (1) FAR 25.109 Rejected Take-off and Landing Performance Criteria
 - (2) FAR 25.933 Thrust Reversers
 - (3) FAR 25.1435(b)(1) Hydraulic System Proof Pressure Testing, applicable to BD-700-1A11 only, documented in Transport Airplane Directorate ELOS Memo AT3532NY-S-1. This equivalent safety finding is similar to exemption no. 6726 FAR 25.1435(b)(1)

Compliance with the following optional requirements has been established:

- (1) Ditching provisions of FAR 25.801 when the safety equipment requirements of FAR 25.1411 and the ditching equipment requirements of FAR 25.1415 are satisfied. Ditching provisions are applicable to the maximum passenger capacity 22 persons (19 passenger and 3 crew)

Airplanes incorporating the Global Vision Flight Deck per Bombardier Modsums 700T901900, 700T901901, 700T901258, and 700T901259 (for BD-700-1A10), or Modsums 700T901900, 700T901902, 700T901258, and 700T901259 (for BD-700-1A11)

For parts of the airplane not changed or not affected by the modification: Cert basis is unchanged from the basic BD-700-1A10 and BD-700-1A11.

For those parts of the airplane that are changed or affected by the modification:

FAR Part 25 dated February 1, 1965, including Amendments 25-1 through 25-119, and 14 CFR 25.1317 at Amendment 25-122. FAR 25 Amendments 25-93, 25-95, 25-98 to 25-103, 25-106 to 25-110, 25-112, and 25-116 to 25-118 are not included in the Type Certification Basis.

14 CFR 25 design standard amendment levels addressed by the Global Vision Flight Deck modification and surpassing that of the basic aircraft correspond to the following:

FAR 25	Section Title	Amendment	Affected Area of Design
25.105(c)	Takeoff	25-92	Flight Director
25.111(a)(b)(c)(d)	Takeoff path	25-115	Flight Director
25.113	Takeoff distance and takeoff run	25-92	Flight Director
25.677(b)	Trim systems	25-115	Trim Control Panel Interface with New Avionics
25.783(e)	Fuselage Doors	25-114	Interface with New Avionics
25.856(a)	Thermal/Acoustic Insulation materials	25-111	Thermal/Acoustical Insulation Form and Part numbering (no material change)
25.1141(f)	Powerplant controls: general	25-115	Interface with New Avionics and Throttle Quadrant Assembly
25.1305(a)(c)(d)	Powerplant instruments	25-115	Interface with New Avionics
25.1317	High-intensity Radiated Fields (HIRF) Protection	25-122	New and Modified Electrical Equipment, Controls , and Wiring
25.1329	Flight guidance system	25-119	New Automatic Flight Control System
25.1353(a)	Electrical equipment and installations	25-113	New and Modified Electrical Equipment, Controls , and Wiring
25.1431(d)	Electronic Equipment	25-113	New and Modified Electronic Equipment
25.1435(b1)	Hydraulic systems	25-104	Interface with New Avionic
25.1439(a)(b)	Protective breathing equipment	25-115	New Electronic Equipment Interface with Existing Electronic Equipment
25.1527	Maximum operating altitude	25-105	Aircraft Ambient Temperature and Altitude Limits
25.1583	Operating limitations	25-105	New Flight Manual
25.1585	Operating procedures	25-105	New Flight Manual

Special Condition No. 25-426-SC, dated May 20, 2011, for Synthetic Vision System on Head-Up Display

No. 25-658-SC, Non-Rechargeable Lithium Batteries, effective to design changes applied for after May 1, 2017. See the applicability section of this special condition for more information on which design changes must meet it.

Equivalent safety has been established for the following requirements:

(1) FAR 25.1317(b): High-intensity Radiated Fields (HIRF) Protection documented in Transport Directorate ELOS Memo TD5590NY-S-17, dated December 9, 2009.

IV - Model BD-700-2A12 (Transport Category), Approved November 07, 2018, by the FAA and September 27 2018, by Transport Canada Civil Aviation

**MAXIMUM
WEIGHTS**

	lb.	kg.
Max. Taxi and Ramp	115,100	52,208
Max. Takeoff	114,850	52,095
Max. Landing	87,600	39,735
Max. Zero Fuel	67,500	30,617
Min. Flight Weight		

*See AFM, as listed in Approved Publications, for other weight limitations and aircraft eligibility.

FUEL CAPACITY

PRESSURE REFUEL (+0/-1%)				
	Load		Weight **	
Usable	U.S. Gal.	liters	lb.	kg
2 main tanks (each)	2,603	9,853	17,550	7,950
1 Center Tank	2,101	7,953	14,200	6,450
Aft Tank	380	1,439	2,550	1,150
Total	7,687	29,098	51,850	23,500
Unusable (drainable)*	12.4	47.0	83.8	38.0
Undrainable*	14.2	53.9	96.1	43.6

** Assuming a fuel density of 6.75 lbs/US Gal

**TYPE CERTIFICATION
APPLICATION DATE**

Initial: June 13, 2012
Deferred: December 10, 2013

**SERIAL NUMBERS
ELIGIBLE**

70001 and subsequent

**APPROVED
PUBLICATIONS**

BD-700-2A12
a) Aircraft Flight Manual (AFM), Bombardier Publication CSP 700-7000-1, Revision Basic, with Document Identification Number GL 7500 AFM and subsequent approved revisions.
b) Airworthiness Limitations Publication, Bombardier Publication BD700-3AB48-11400-01 Revision 003, with Document Identification Number GL 7500 AWL, and subsequent approved revisions

**Type Certification
Configuration**

The approved type design is defined in the document RAO-BA700-049 Revision C or later approved revision.

The approved type design appropriate for the "as delivered" configuration of a particular BD-700-2A12 airplane is defined in RAL-700-XXXXX (XXXXX denotes the serial number for the aircraft concerned).

C. G. RANGE Refer to Transport Canada approved Aircraft Flight Manual (AFM), Bombardier Publication CSP 700-7000-1 for the appropriate configuration.

DATUM FS 0.0 is located at 397.5 inches forward of the weighing datum. The weighing datum is marked on a plate forward of the wing fairing on the bottom of the fuselage on the aircraft center line at FS 397.5.

LEVELING MEANS The aircraft is levelled in the longitudinal and lateral axes by means of a plumb bob and target in the aft equipment bay at Fuselage Station (FS) 962.73.

ENGINES Two General Electric Passport 20-19BB1A

FUEL See Applicable AFMs listed in Approved Publications

OIL Engine, APU: Refer to Aircraft Maintenance Publication (AMP), Bombardier Publication BD700-3AB48-10200-00, Chapter 51, for the appropriate configuration.

ENGINE LIMITS See Applicable AFMs listed in Approved Publications
CONDITIONS

OIL TEMPERATURE See Applicable AFMs listed in Approved Publications

OIL PRESSURE See Applicable AFMs listed in Approved Publications

OIL CAPACITY

	Load		Weight*	
	U.S. Gal.	liters	lb.	kg.
2 Engines (each) (Incl. oil repl. lines)	4.9	18.5	40	18
1 Oil Repl. Tank	1.6	6.1	13	6
Total	11.4	43.0	92	42

*Assuming a fluid density 8.1073 lb/USG (0.971 kg/L).

APU Safran SPU300 [BA]

APU LIMITS See Applicable AFMs listed in Approved Publications

AIRSPEED LIMITS

	knots	Mach
V_{mo} and M_{mo}	-	-
Sea Level to 8000 ft.	300	-
10000 ft. to 16000 ft.	335	-
20000 ft. to 35000 ft.	320	-
@ 35000 ft.	-	0.925
@ 51000 ft.	-	0.925
V_{fe}	-	-
Flap 1	225	-
Flap 2	210	-
Flap 3	210	-
Flap 4	185	-
V_{fc} and M_{fc}	-	-
10000 ft to 16000 ft	353	-
20000 ft to 35000 ft	338	-
@ 51000 ft	-	0.947
V_d and M_d	-	-
Sea Level to 16000 ft	370	-
20000 ft to 34100 ft	355	-
34100 ft to 51000 ft	-	0.995
V_a (Design Maneuvering)	See applicable AFM for variation of V_a with altitude and aircraft weight	
V_{mca}	-	-
Flap 2	100	-
Flap 3	98	-
V_{mcl}	-	-
Flap 2	103	-
Flap 3	98	-
Flap 4	96	-
V_{mcg}	-	-
Flap 2	105.6	-
Flap 3	105.6	-
V_{LO}	200	-
V_{LE}	250	-

MEAN AERO-DYNAMIC CHORD

179.04 in. (4.5 m) (MAC leading edge at fuselage station 715.32 in.)

MINIMUM CREW

Two (Pilot and Co-Pilot)

MAXIMUM OCCUPANTS

Twenty two (including the crew and no more than 19 passengers)
See Note 2

MAX. OPERATING ALTITUDE

See applicable AFM as listed in Approved Publications

CONTROL SURFACE MOVEMENTS

Rudder	37° Left	37° Right
Horizontal Stabilizer	4.5° LE Up	12.5° LE Down
Aileron	25° TE Up	24° TE Down
Elevator	30° TE Up	19° TE Down
Ground spoilers	45° Up	-

Multi-function spoilers (Inboard to Outboard)	40/45/50 ° Up	-
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SERVICE INFORMATION Service Bulletins, structural repair manuals, and aircraft flight manuals which contain a statement that the document is Transport Canada approved or Transport Canada approved through the Manufacturers Design Approval Representative are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only.

IMPORT ELIGIBILITY A U.S. Airworthiness Certificate may be issued on the basis of the Canadian Department of Transport "Certificate of Airworthiness for Export" signed by the Minister of Transport. This form must contain the following statement:

"This certifies that the aircraft described below has been manufactured in conformity with data forming the basis for the Transport Canada Type Certificate No. A-177 and includes the minimum type design defined in document RAO-BA700-049 at Revision Cor subsequent approved revisions as being required to comply with the basis for the FAA Type Certificate No. T00003NY", and is in a condition for safe operation.

CERTIFICATION BASIS 1. Airworthiness Standards:
Federal Aviation Administration (FAA), Title 14, Code of Federal Regulations (14 CFR), Part 25 effective February 1, 1965, including Amendments 25-1 through 25-138 with the following exceptions:

§ 25.773 Amendment 25-144 for the Enhanced Flight Vision System (EFVS) only.

Including optional design requirements:

- a) Ditching (limited to structural provisions): § 25.801(b)(c)(e)
- b) Icing: § 25.1419

2. Special Conditions

25-581-SC	Design Roll-Maneuver Condition.
25-587-SC	Electronic Flight Control System: Control Surface Awareness and Mode Annunciation
25-588-SC	Side Stick Controllers: Pilot Strength, Pilot Control Authority, and Pilot Control
25-593-SC	Flight Envelope Protection, High-Speed Limiting
25-615-SC	Airplane Electronic System Security Protection From Unauthorized External Access
25-631-SC	Automatic Speed Protection for Design Dive Speed
25-633-SC	Airplane Electronic-System Security Protection From Authorized Internal Access
25-635-SC	Interactions of Systems and Structures
25-636-SC	Sidestick Controllers
25-637-SC	Hydrophobic Coatings in Lieu of Windshield Wipers
25-647-SC	Electronic Flight Control System: Lateral- Directional and Longitudinal Stability, and Low-Energy Awareness
25-653-SC	Operation Without Normal Electrical Power.
25-656-SC	Fuselage In-Flight Fire Safety and Flammability Resistance of Aluminum-Lithium Material
25-658-SC	Non-Rechargeable Lithium Batteries (See Note 22)
25-670-SC	Limit Engine Torque Loads
25-695-SC	Fuselage Post-Crash Fire Survivability
25-717A-SC	Flight Envelope Protection: Pitch and Roll Limiting
25-718-SC	Synthetic Vision System on Head-Up Display
25-719-SC	Flight-Envelope Protection: General Limiting Requirements
25-720-SC	Flight Envelope Protection: Normal Load Factor (g) Limiting
25-725-SC	Flight Envelope Protection: High Incidence Protection System
25-727-SC	Autobrake System Structural Loads
25-734-SC	Multiple-Place Side-Facing Seats with Active Leg Flail Restraint Device and Shoulder-Belt Airbags
25-735-SC	Enhanced Flight Vision System (EFVS)

3. Equivalent Safety Findings

ELOS Memo	Requirement	Title
AT7180NY-T-GA-ES-06	25.831(g)	Acceptable High Temperature Physiological Environment During Failure Conditions - Equivalent Safety Finding (Cabin Temperature - Humidity Limits)
AT7180NY-T-GA-P-06	25.901(d), and 14 CFR part 25 subpart E, F, and G applicable to APU installations	Part 25 Subparts E, F, and G (Added as Subpart J) APU Certification Requirements
AT7180NY-T-IP-P-21	14 CFR 25.901, 25.903, 25.1305, 25.1309, 25.1321, 25.1322 and 25.1549	Digital Only Display of the Turbine Engine Required Parameters
AT7180NY-T-GA-SA-05	25.901, 25.1301 and 25.1309	25.1309(a)(b)(c)(d)(e) Equipment, Systems, & Installations Requirements - ESF Using ARAC 901, 1301, & 1309
AT7180NY-T-CL-SM-02	25.671	Flight Control System Failure Criteria
AT7180NY-T-GA-A-02	25.391 25.395(b) 25.415	25.391, 25.395(b), 25.415 Ground Gust Condition
AT7180NY-T-GA-A-03	25.341(a)(5) (i)(b) 25.343(b)(1) (ii) 25.345(c)(2) 25.371 25.373(a) 25.391 25.1517	Gust and Continuous Turbulence Loads
AT7180NY-T-GA-A-04	25.721 25.963(d) 25.994	Emergency Landing Conditions
AT7180NY-T-GA-ES-05	25.841(a) 25.841(b)(6)	Cabin Pressurization – High Altitude Airports
AT7180NY-T-AT7285NY-T-GA-F-06	25.331(c)(2)	Checked Pitch Maneuver
AT7180NY-T-GA-P-01	25.933(a)(1)	Flight Critical Thrust Reverser
AT7180NY-T-GA-SA-02	25.1303(a)(3)) 25.1327(a)(b)) 25.1547	Use of an Electric-Only Direction Indicator Standby Instrumentation
AT7180NY-T-GA-SE-01	25.1317(b)	High-Intensity Radiated Fields
AT7180NY-T-GA-SE-05	25.1389(b)(3) 25.1395	Maximum Allowable Overlapping Intensities on Position Lights
AT7180NY-T-GA-F-25	25.1322 (c)(2) 25.1322 (e)(1)	Flight Crew Alerting
AT7180NY-T-CL-F-24	25.161(c)(1)	Longitudinal Trim

ST08054NY-T-GA-CS-02	25.811, 25.812	Emergency Exit and Exit Locator Sign
ST08054NY-T-GA-CS-04	25.785	Occupant Retention - Lap Belt Rebound Position Assessment for Injury
ST08054NY-T-GA-CS-06	25.1443	Passenger Cabin Minimum Mass Flow of Supplemental Oxygen
ST08054NY-T-GA-P-08	21.21, 25.851, 25.857, 25.1195, 25.1309	Powerplant Fire Extinguishing System Bottle
ST08054NY-T-GA-ES-02	25.851 (b), 25.857 (b) (1)	Shared Fire Extinguisher Bottle for the Class B Baggage Compartment Fire Protection System
ST08054NY-T-GA-ES-01	25.851	Built-In Fire Extinguishing System in place of Hand Fire Extinguisher for a Class B Baggage Compartment

4. Exemptions:

- No. 11162A 14 CFR 25.809 (a) Relief from the requirement to view the likely area of evacuee ground contact for the flight crew emergency exit in addition to the overwing exit.
- No. 17817 14 CFR 25.981(a) (3) Use of the provisions of FAA Policy Statement PS-ANM-25.981-02, Policy on Issuance of Special Conditions and Exemptions Related to Lightning Protection of Fuel Tank Structure and Systems, for fuel tank lightning protection as an alternative to full compliance to § 25.981(a)(3).
- No. 17895 14 CFR 25.901 (c) single failures that result in uncontrollable high thrust. See Note 21.
- No. 18049 14 CFR 25.1322(a)(2) L(R) ENG Flameout Caution Messages Inhibited
- No. 17716 14 CFR 25.1447(c)(1) Relief from the requirement for passenger oxygen masks to be automatically presented before the cabin pressure altitude exceeds 15,000 feet
- No. 18007 14 CFR 25.813(e) Allow for the installation of doors between passenger seats and passenger emergency exits

5. Noise Standards:

14 CFR Part 36, effective December 1, 1969, as amended by Amendments 36-1 through 36-29 inclusive.

6. Fuel Venting and Exhaust Emission Standards:

14 CFR Part 34, effective September 10, 1990, as amended by Amendments 34-1 through 34-5A inclusive.

7. A finding of regulatory adequacy pursuant to the “Noise Control Act of 1972” (49 USC Section 44715

ADDITIONAL DESIGN REQUIREMENTS AND CONDITIONS:**1) Engine Damage From Wing Ice Caused by Cold Soaked Fuel.**

The potential hazards associated with ice that may form on the wings due to cold soaked fuel have been addressed through an analysis of the basic aircraft design, plus an airplane flight manual (AFM) limitation specific to this concern. The AFM limitation references the Flight Crew Operating Manual (FCOM). The FCOM has inspection criteria based on fuel temperature and observed ambient weather conditions, and includes the requirement for a tactile inspection. This information must be retained such that any ice accumulation on the upper wing surface after refueling will be detected and addressed.

2) Inflight Engine Restart

Compliance shown by test. Any modifications to the associated AFM procedures require evaluation to ensure an unsafe condition is not introduced. Changes in the engine design affecting engine restart require aircraft-level evaluation.

V. Data Pertinent to all Models except as indicated

EQUIPMENT The basic equipment as prescribed in the applicable requirements (See certification basis) must be installed in the aircraft.

NOTE 1 A current weight and balance report must be provided for each aircraft at the time of the original airworthiness certification and at all times thereafter except in case of an operator having an FAA approved loading system for weight and balance control.

NOTE 2 The green aircraft type design configuration does not include passenger provisions. Carriage of persons in the cabin is permitted when an approved seating arrangement and related required passenger provisions are incorporated in accordance with the Type Certificate Basis.

NOTE 3 System fuel, which must be included in the empty weight, is the amount of fuel required to fill the system plumbing and tanks to the undrainable level plus unusable fuel in the fuel tanks. The weight of undrainable and unusable fuel defined in the Fuel Capacity section must be included in the empty weight of the airplane.

NOTE 4 BD-700-1A10 and BD-700-1A11
Placards must be installed in accordance with Bombardier Drawings: GC 789-0001, GD 972-0001, GM 972-0010, GS 782-0001 (for BD-700-1A10 only), and GS 782-5001 (for BD-700-1A11 only).

BD-700-1A10 and BD-700-1A11 – Equipped with the “Global Vision Flight Deck”
Placards must be installed in accordance with Bombardier Drawings GC 789-7000, GC 789-7001, GD 972-0001, GM 972-0010, GS 782-0001 (BD-700-1A10 only), GS 782-5001 (BD-700-1A11 only), GC 789-7500 (BD-700-1A11 only).

BD-700-2A12
Placards must be installed in accordance with Bombardier Drawings: G05318400, G01100006, G05378400, G05387700, G05387900, G05700014, G05313290, G05217000, G05290700, G00693181, G05290800, G00611121 and G00611122.

- NOTE 5 The airplane life limits and repetitive inspections for components and equipment and information essential for proper maintenance, are listed in Bombardier Publication BD 700 TLMC (BD-700-1A10), BD-700-1A11 TLMC (BD-700-1A11), GL 6000 TLMC (BD-700-1A10 equipped with the “Global Vision Flight Deck”) and GL 5000 GVFD TLMC (BD-700-1A11 equipped with the “Global Vision Flight Deck”). These limitations may not be changed without FAA Engineering approval.
- NOTE 6 Refers to aircraft which incorporate Bombardier Service Bulletin SB 700-11-007
- NOTE 7 Refers to aircraft which incorporate Bombardier Service Bulletin SB 700-11-011
- NOTE 8 Refers to BD-700-1A10 aircraft which incorporate Bombardier Service Bulletin SB 700-34-020, or have modification 700T01613 incorporated during production. All BD-700-1A11 aircraft have modification 700T01613 incorporated during production.
- NOTE 9 FAA Exemption No. 7120C (Regulatory Docket No. FAA-2002-13385) was issued to Bombardier Aerospace, on September 2, 2003 which granted an exemption from the requirements of 25.785(b) for the general occupant protection requirements for occupants of multiplace side-facing seats that are occupied during take off and landing for Bombardier Global Express BD-700-1A10 airplanes.
- FAA Exemption No. 7120D (Regulatory Docket No. FAA-2002-13385) was issued to Bombardier Aerospace, on June 13, 2005 which granted an exemption from the requirements of 25.785(b) for the general occupant protection requirements for occupants of multiplace side-facing seats that are occupied during take off and landing for Bombardier Global Express BD-700-1A11 airplanes.
- NOTE 10 Refers to aircraft which incorporate Bombardier Service Bulletin SB 700-11-016.
- NOTE 11 The certification basis for airplane model BD-700-1A10 and BD-700-1A11 includes FAR 25.831 at Amendment 25-89 and FAR 25.841 at Amendment 25-87. These regulations address operation at high altitude and include pressurization system requirements, as well as structural requirements on the pressure vessel. In addition, a high altitude special condition, which contains similar requirements, was applied by the Canadian authorities. Therefore, any changes to the pressurization system or modifications or repairs to the pressure vessel must be approved in accordance with these and other applicable requirements.

- NOTE 12 FAA Exemption No. 7259 (Regulatory Docket No. 29819) and 7891 (Regulatory Docket No. FAA-2002-12350) were issued to Bombardier Aerospace, on June 29, 2000 which granted exemption from the requirements of FAR 25.813(e) for the installation of doors in partitions between passenger compartments for the BD-700-1A10 aircraft.
- FAA Exemption No. 7259A (Regulatory Docket No. FAA-2005-21272) was issued to Bombardier Aerospace, on June 13, 2005 which granted exemption from the requirements of FAR 25.813(e) for the installation of doors in partitions between passenger compartments for the BD-700-1A11 aircraft.
- FAA Exemption No. 18074 (Regulatory Docket No. FAA-2018-0530) was issued to Bombardier Aerospace, on December 4, 2018 which granted exemption from the requirements of FAR § 25.901(c) for the relief from full compliance with the regulation as it relates to single failures that result in uncontrolled high thrust (UHT) for Model BD-700-1A10 and BD-700-1A11 airplanes.
- NOTE 13 The Global Express is a marketing designation for the Model BD-700-1A10 aircraft and the Global 5000 is a marketing designation for the Model BD-700-1A11 aircraft. FAA Airworthiness Directives will be issued against the Model numbers (BD-700-1A10, or BD-700-1A11)
- NOTE 14 The higher weights are applicable to aircraft that are either post modification Bombardier Service Bulletin SB 700-1A11-11-002 or post modification Bombardier Modsum 700T97079C.
- NOTE 15 Refers to aircraft which incorporate Bombardier Service Bulletin SB 700-11-020
- NOTE 16 BD-700-1A10 and BD-700-1A11 “Global Vision Flight Deck” Definition
The Global Vision Flight Deck designation for the BD-700-1A10 and BD-700-1A11 does not correspond to a model designation. This is only a commercial designation for airplanes on which Modsums 700T001900, 700T901901, 700T901258, and 700T901259 (for BD-700-1A10), and Modsums 700T901900, 700T901902, 700T901258, and 700T901259 (BD-700-1A11) have been embodied.
- Major Change Modification numbers 700T001900, 700T901901, 700T901258, and 700T901259 (for BD-700-1A10), and 700T901900, 700T901902, 700T901258, and 700T901259 (for BD-700-1A11) install the Rockwell Collins ProLine Fusion avionics suite. This system architecture is mainly built around 4 Integrated Processing Cabinets (IPC), 2 Data Concentration Unit Module Cabinets (DMC), 2 Radio Interface Units (RIU), 2 Audio Control Panels (ACP), 2 Reversion Switch Panels (RSP) and 4 14.1 inch Liquid Crystal Displays. The pilots have access to the system using the 2 Cursor Control Devices (CCDs) and 2 Control Tuning Panels (CTP).

ModSums 700T901900 and 700T901901 are baseline on all BD-700-1A10 aircraft, serial number 9313, 9381, 9432 and subsequent, excluding 9998.

ModSums 700T901900 and 700T901902 are baseline on all BD-700-1A11 aircraft, serial number 9386, 9401, 9445 and subsequent, excluding 9998.

The LCD HUD is separately installed via Modsums 700T97369 (BD-700-1A10) and 700T97578 (BD-700-1A11).

All parameters listed in the preceding sections I and II for the basic BD-700-1A10 and BD-700-1A11 remain valid for airplanes which incorporate Modsums 700T901900 and 700T901901 (for BD-700-1A10), or Modsums 700T901900 and 700T901902 (for BD-700-1A11).

Refer to document RAZ-C700-127 at Issue A-10 or later approved revision for additional Modsums required to comply with the FAA basis of certification.

NOTE 17

The Global 6000 is a marketing designation for BD-700-1A10 equipped with the “Global Vision Flight Deck”, corresponding to aircraft serial numbers 9313, 9381, 9432 and subsequent, excluding 9998.

The Global 5000 featuring the Global Vision Flight Deck is a marketing designation for BD-700-1A11 equipped with the “Global Vision Flight Deck”, corresponding to aircraft serial numbers 9386, 9401, 9445 and subsequent, excluding 9998.

NOTE 18

All variants of the BD-700-1A10, BD-700-1A11, and BD-700-2A12 are compliant with RVSM airworthiness requirements through basic equipment. Each operator must obtain RVSM operating approval directly from the FAA.

NOTE 19

BD-700-1A10 and BD-700-1A11 – Equipped with the “Global Vision Flight Deck”
BD-700-1A10 and BD-700-1A11 equipped with the "Global Vision Flight Deck" are compliant with RNP RNAV, down to RNP 0.3 RNAV through basic equipment.

NOTE 20

The Global 7500 (previously known as Global 7000) is a marketing designation for BD-700-2A12.

NOTE 21

For BD-700-2A12, The FAA has concluded that the occurrence of any uncontrollable high-thrust failure condition, or any of the associated causal failures listed within Global 7500 Aircraft Maintenance Publication (BD700-3AB48-10200-00), may endanger the safe operation of an airplane. Consequently, the FAA recommends that operators be encouraged to report any such failures in accordance with 14 CFR 121.703(c), 125.409(c), 135.415(c)

NOTE 22

No. 25-658-SC, Non-Rechargeable Lithium Batteries, effective to design changes applied for after May 1, 2017. See the applicability section of this special condition for more information on which design changes must meet it.

.....END.....